RAW SEQUENCE LISTING

The Biotechnology Systems Branch of the Scientific and Technical Information Center (STIC) no errors detected.

Application Serial Number: 10 049,586A

Source: 1706

Date Processed by STIC: 44-05

ENTERED



IFW16

RAW SEQUENCE LISTING DATE: 04/04/2005
PATENT APPLICATION: US/10/049,586A TIME: 14:47:52

Input Set : A:\140140349U2.AMENDSEQ.TXT
Output Set: N:\CRF4\04012005\J049586A.raw

4 <110> APPLICANT: Blackshear, Perry J. 5 Carballo-Jane, Ester Lai, Wi S. 9 <120> TITLE OF INVENTION: TTP-RELATED ZINC FINGER DOMAINS AND METHODS OF USE 12 <130> FILE REFERENCE: 14014.0349U2 Pa. 6) 14 <140> CURRENT APPLICATION NUMBER: 10/049,586A 15 <141> CURRENT FILING DATE: 2002-02-12 17 <150> PRIOR APPLICATION NUMBER: PCT/US00/22199 18 <151> PRIOR FILING DATE: 2000-08-14 20 <150> PRIOR APPLICATION NUMBER: 60/148,810 21 <151> PRIOR FILING DATE: 1999-08-13 23 <160> NUMBER OF SEQ ID NOS: 48 25 <170> SOFTWARE: FastSEQ for Windows Version 4.0 27 <210> SEQ ID NO: 1 28 <211> LENGTH: 326 29 <212> TYPE: PRT 30 <213> ORGANISM: Homo sapiens 32 <400> SEQUENCE: 1 33 Met Asp Leu Thr Ala Ile Tyr Glu Ser Leu Ser Leu Ser Pro Asp 34 1 5 35 Val Pro Val Pro Ser Asp His Gly Gly Thr Glu Ser Ser Pro Gly Trp 25 37 Gly Ser Ser Gly Pro Trp Ser Leu Ser Pro Ser Asp Ser Ser Pro Ser 39 Gly Val Thr Ser Arg Leu Pro Gly Arg Ser Thr Ser Leu Val Glu Gly 41 Arg Ser Cys Gly Trp Val Pro Pro Pro Gly Phe Ala Pro Leu Ala 70 75 43 Pro Arg Leu Gly Pro Glu Leu Ser Pro Ser Pro Thr Ser Pro Thr Ala 85 90 45 Thr Ser Thr Thr Pro Ser Arg Tyr Lys Thr Glu Leu Cys Arg Thr Phe 105 100 47 Ser Glu Ser Gly Arg Cys Arg Tyr Gly Ala Lys Cys Gln Phe Ala His 120 49 Gly Leu Gly Glu Leu Arg Gln Ala Asn Arg His Pro Lys Tyr Lys Thr 130 135 51 Glu Leu Cys His Lys Phe Tyr Leu Gln Gly Arg Cys Pro Tyr Gly Ser 155 150 53 Arg Cys His Phe Ile His Asn Pro Ser Glu Asp Leu Ala Ala Pro Gly 170 55 His Pro Pro Val Leu Arg Gln Ser Ile Ser Phe Ser Gly Leu Pro Ser

185

190

56

180

Input Set : A:\140140349U2.AMENDSEQ.TXT
Output Set: N:\CRF4\04012005\J049586A.raw

57 Gly Arg Arg Thr Ser Pro Pro Pro Gly Leu Ala Gly Pro Ser Leu 195 200 59 Ser Ser Ser Phe Ser Pro Ser Ser Pro Pro Pro Pro Gly Asp 210 215 61 Leu Pro Leu Ser Pro Ser Ala Phe Ser Ala Ala Pro Gly Thr Pro Leu 230 235 63 Ala Arg Arg Asp Pro Thr Pro Val Cys Cys Pro Ser Cys Arg Arg Ala 245 250 65 Thr Pro Ile Ser Val Trp Gly Pro Leu Gly Gly Leu Val Arg Thr Pro 265 67 Ser Val Gln Ser Leu Gly Ser Asp Pro Asp Glu Tyr Ala Ser Ser Gly 280 69 Ser Ser Leu Gly Gly Ser Asp Ser Pro Val Phe Glu Ala Gly Val Phe 295 300 71 Ala Pro Pro Gln Pro Val Ala Ala Pro Arg Arg Leu Pro Ile Phe Asn 73 Arg Ile Ser Val Ser Glu 76 <210> SEQ ID NO: 2 77 <211> LENGTH: 338 78 <212> TYPE: PRT 79 <213> ORGANISM: Homo sapiens 81 <400> SEQUENCE: 2 82 Met Thr Thr Leu Val Ser Ala Thr Ile Phe Asp Leu Ser Glu Val 10 84 Leu Cys Lys Gly Asn Lys Met Leu Asn Tyr Ser Ala Pro Ser Ala Gly 86 Gly Cys Leu Leu Asp Arg Lys Ala Val Gly Thr Pro Ala Gly Gly Gly 40 88 Phe Pro Arg Arg His Ser Val Thr Leu Pro Ser Ser Lys Phe Arg Gln 90 Asn Gln Leu Leu Ser Ser Leu Lys Gly Glu Pro Ala Pro Ala Leu Ser 92 Ser Arg Asp Ser Arg Phe Arg Asp Arg Ser Phe Ser Glu Gly Glu Glu 94 Arg Leu Leu Pro Thr Gln Lys Gln Pro Gly Gly Gln Val Asn Ser 100 105 96 Ser Arg Tyr Lys Thr Glu Leu Cys Arg Pro Phe Glu Glu Asn Gly Ala 120 98 Cys Lys Tyr Gly Asp Lys Cys Gln Phe Ala His Gly Ile His Glu Leu 135 100 Arg Ser Leu Thr Arg His Pro Lys Tyr Lys Thr Glu Leu Cys Arg Thr 155 101 145 150 102 Phe His Thr Ile Gly Phe Cys Pro Tyr Gly Pro Arg Cys His Phe Ile 170 104 His Asn Ala Glu Glu Arg Arg Ala Leu Ala Gly Ala Arg Asp Leu Ser 185 106 Ala Asp Arg Pro Arg Leu Gln His Ser Phe Ser Phe Ala Gly Phe Pro

Input Set : A:\140140349U2.AMENDSEQ.TXT
Output Set: N:\CRF4\04012005\J049586A.raw

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109		210					215					220				
110	Ser	Ile	Thr	Pro	Pro	Pro	Ile	Leu	Ser	Ala	Asp	Asp	Leu	Leu	Gly	Ser
	225					230					235					240
112	Pro	Thr	Leu	Pro	Asp	Gly	Thr	Asn	Asn	Pro	Phe	Ala	Phe	Ser	Ser	Gln
113					245					250					255	
114	Glu	Leu	Ala		Leu	Phe	Ala	Pro	Ser	Met	Gly	Leu	Pro	Gly	Gly	Gly
115				260					265					270		
	Ser	Pro		Thr	Phe	Leu	Phe	_	Pro	Met	Ser	Glu		Pro	His	Met
117			275					280					285	_		
	Phe	_	Ser	Pro	Pro	Ser		Gln	Asp	Ser	Leu		Asp	Gln	Glu	Gly
119		290					295					300		_	_	
	_	Leu	Ser	Ser	Ser		Ser	Ser	His	Ser	-	Ser	Asp	Ser	Pro	
	305					310			_		315					320
	Leu	Asp	Asn	Ser		Arg	Leu	Pro	Ile		Ser	Arg	Leu	Ser		Ser
123					325					330					335	
	Asp Asp															
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134	1				5					10					15	
	Lys	Thr	Glu	-	Ser	Leu	Ala	Asn	Leu	Asn	Leu	Asn	Asn		Leu	Asp
136			_	20_	_	_		_	25		_			30		
	Lys	Lys		Val	Gly	Thr	Pro		Ala	Ala	Ala	Pro		Ser	Gly	Phe
138	n _		35					40			_		45		_ =	_
	Ala		Gly	Phe	Leu	Arg	_	His	Ser	Ala	Ser		Leu	His	Ala	Leu
140		50			_	_	55		_		_	60	_	_,	_	
		His	Pro	Ala	Pro		Pro	Gly	Ser	Cys		Pro	Lys	Phe	Pro	
142					_	70	_		_^		75		~-3	~-3	_	80
	Ala	Ala	Asn	Gly		Ser	Cys	Gly	Ser		Ala	Ala	GIĀ	Gly		Thr
144	_	\Box	~-3	_,	85	_		_	_	90	~ 3	~7	~3		95	_
	Ser	Tyr	GIY		Leu	Lys	Glu	Pro	Ser	GIY	GIY	GLY	GLY		Ala	Leu
146	_	_	_	100	_	_	_,	_	105	_	_	-1	_	110	_	~3
	Leu	Asn	_	GIu	Asn	Lys	Phe	_	Asp	Arg	Ser	Phe		Glu	Asn	GIY
148	_	_	115	~-7	1		_	120		~-7	~-3	~ 3	125	_	~3	~3
	Asp		Ser	GIn	His	Leu		His	Leu	GIn	GIn		GIn	гàг	GIY	GIY
150		130	_			_	135	_,	_	_	_	140	~-3	_	_	_
	_	GIY	Ser	GIn	Ile		Ser	Thr	Arg	Tyr		Thr	GIu	Leu	Cys	
	145				_	150		_	_	_	155	~ 7	_	_	~ 3	160
	Pro	Phe	Glu	Glu		Gly	Thr	Cys	Lys		GIY	GIu	rys	Cys		Phe
154		•	~-7	_,	165	~-	_	_	_	170	m1	_		_	175	
	Ala	His	Gly		His	Glu	Leu	Arg	Ser	Leu	Thr	Arg	His		гàг	Tyr
156	_	_,		180	_	_		_,	185	1		~-	-1	190	_	_
	Lys	Thr		Leu	Cys	Arg	Thr		His	Thr	He	GLy		Cys	Pro	Tyr
158		_	195	_	•		_ ~	200	_		_		205	_	÷	
159	Gly	Pro	Arg	Cys	His	Phe	Ile	His	Asn	Ala	Asp	Glu	Arg	Arg	Pro	Ala

Input Set : A:\140140349U2.AMENDSEQ.TXT
Output Set: N:\CRF4\04012005\J049586A.raw

1.00		210					215					220				
160	D	210	~ 1	G1	21-	Com		7 ~~	T 011	7 ~~~	77.		C1	Th-	7 ~~	7 an
		ser	GIY	GIY	Ala		GIY	Asp	Leu	Arg		Pne	GIY	Thr	Arg	
	225		***	•	01	230	D	3	61	D	235	D	T		*** -	240
	Ala	Leu	His	Leu	_	Pne	Pro	Arg	Glu		Arg	Pro	гуѕ	Leu		HIS
164	_	_	_		245		_,	_	_	250	•	•		_	255	~-3
	Ser	Leu	Ser		Ser	GLY	Phe	Pro	Ser	GIY	His	His	GIn		Pro	GIY
166	_		_	260					265					270		_
	Gly	Leu		Ser	Pro	Leu	Leu		Asp	Ser	Pro	Thr		Arg	Thr	Pro
168			275					280					285		_	
169	Pro		Pro	Ser	Cys	Ser		Ala	Ser	Ser	Cys		Ser	Ser	Ala	Ser
170		290					295					300				
171	Ser	Cys	Ser	Ser	Ala	Ser	Ala	Ala	Ser	Thr	Pro	Ser	Gly	Thr	Pro	Thr
	305					310					315					320
173	Cys	Cys	Ala	Ser	Ala	Ala	Ala	Ala	Leu	Arg	Leu	Leu	Tyr	Gly	Thr	Gly
174					325					330					335	
175	Gly	Ala	Glu	Asp	Leu	Leu	Ala	Pro	Gly	Ala	Pro	Cys	Ala	Ala	Cys	Ser
176				340					345					350		
177	Ser	Ala	Ser	Cys	Ala	Asn	Asn	Ala	Phe	Ala	Phe	Gly	Pro	Glu	Leu	Ser
178			355					360					365			
179	Ser	Leu	Ile	Thr	Pro	Leu	Ala	Ile	Gln	Thr	His	Asn	Phe	Ala	Ala	Val
180		370					375					380				
181	Ala	Ala	Ala	Ala	Tyr	Tyr	Arg	Ser	Gln	Gln	Gln	Gln	Gln	Gln	Gln	Gly
182	385					390					395					400
183	Leu	Ala	Pro	Pro	Ala	Gln	Pro	Pro	Ala	Pro	Pro	Ser	Ala	Thr	Leu	Pro
184					405					410					415	
185	Ala	Gly	Ala	Ala	Ala	Pro	Pro	Ser	Pro	Pro	Phe	Ser	Phe	Gln	Leu	Pro
186				420					425					430		
187	Arg	Arg	Leu	Ser	Asp	Ser	Pro	Val	Phe	Asp	Ala	Pro	Pro	Ser	Pro	Pro
188	_	_	435					440					445	•		
189	Asp	Ser	Leu	Ser	Asp	Arg	Asp	Ser	Tyr	Leu	Ser	Gly	Ser	Leu	Ser	Ser
190	_	450			_	_	455					460				
191	Gly	Ser	Leu	Ser	Gly	Ser	Glu	Ser	Pro	Ser	Leu	Asp	Pro	Gly	Arg	Arg
	465				_	470					475	_		_	_	480
193	Leu	Pro	Ile	Phe	Ser	Arq	Leu	Ser	Ile	Ser	Asp	Asp				
194					485	_				490	_	_				
196	<210)> SI	EQ II	ONO:	: 4											
				H: 27												
	<212															
					Xend	pus	laevis									
				NCE:												
						Asp	Ser	Leu	Asp	Leu	Phe	Ser	Ser	Phe	Phe	Pro
203	1				5	тр			TIPP	10					15	
		Len	Ser	Pro		Ala	Asp	Pro	Glu		Pro	Len	Len	Pro		Phe
205	O111	Leu	201	20			1.50		25			u	u	30	~~-	
	Ser	Δ7 a	Dro		Lare	ніс	Leu	Ser	Leu	Ser	Ser	T.eu	Ara		Luc	Thr
207	JEI	TIG	35	110	пyз	1113	.u∈α	40	LC U	JUL	DCI	L CU	45	- 1 -	y -S	****
	Glu	T.au		Sar	Δνα	ጥኒታዮ	ב [מ	-	Ser	Glv	Dhe	Cve		ጥህጕ	Δra	Δen
209	Gru	50	Cys	OGI	A. y	- Y -	55	JIU	JGI	OT A	T 11G	60	ліа	- y -	n.y	ווטה
	7 ~~		C1~	Dha	λ Ι~	ui -		T 011	Ser	G1	Levi		Dro	Dro	17.2.1	Gl =
210	HIG	Cys	GIII	FIIG	HIG	urs	GIA	пeп	OCT	Gru	neu	Hr.A	L I O	FIO	val	GIII

Input Set : A:\140140349U2.AMENDSEQ.TXT
Output Set: N:\CRF4\04012005\J049586A.raw

211	65					70					75					80
	His	Dro	Tvc	Ω	Tarc		Clu	Lou	Cvc	Ara		Dho	Uic	v-1	Lan	
213	urs	FIO	цуз	ıyı	By 5	1111	GIU	пец	Суз	90	Ser	rne	1113	Vai	95	Gry
	Thr	Cvc	Nen	Tur		T.011	λνα	Cvc	I.au		Tla	ніс	Ser	Dro		Glu
215	1111	Cys	Maii	100	Gry	Бец	n. g	СуБ	105	FIIC	110	1113	SCI	110	GIII	Olu
	Arg	Δrα	Glu		Dro	Va 1	T.611	Dro		Δen	T.011	Sar	T.011		Pro	Ara
217	Arg	ALG	115	PIO	FIU	vaı	пец	120	тэр	MSII	пец	261	125	rio	FIO	AL 9
	Arg	Tur		Glv	Dro	Tur	Ara		Ara	Cve	Δra	T.e.u		Ser	Δla	Pro
219	Arg	130	Gry	Gry	FIO	ı yı	135	Giu	n-9	Cys	nr 9	140	пр	OC.	711U	110
	Gly		Cve	Pro	Tur	Glv		Δra	Cvc	Hic	Dhe		His	Pro	T.vs	Ser
	145	Gry	Cys	110	ı yı	150	nia	n. g	Cys	1115	155	0111		110	- 175	160
	Ala	Ara	Glu	Thr	Cvs		His	Phe	Δla	Δla		Glv	Asp	Cvs	Pro	
223	niu	****9	Olu		165	**** 9				170	200			O _I D	175	-1-
	Gly	Ala	Cvs	Cvs		Phe	Ser	His	Ser		Pro	Leu	Asp	Ara		Glv
225	O ₁		CyD	180		1	501		185				···cp	190		1
	Ser	Glv	Thr		Asn	Ser	Ser	Glv		Leu	Ser	Pro	Ser		Pro	Asp
227		- I	195	-1-				200					205			
	Ser	Asp		Asp	Thr	Pro	Val		Ser	Glu	Ser	Pro	Ala	Asn	Asn	Ala
229		210					215					220				
	Phe		Phe	Ser	Ser	Leu		Leu	Pro	Leu	Ala	Leu	Arq	Leu	Gln	Ile
	225					230					235		•			240
232	Leu	Gly	Asp	Asp	Asp	Leu	Pro	Thr	Ala	Ser	Asp	Pro	Leu	Pro	Gly	Asp
233		-	-	-	245					250	_				255	_
234	Asp	Thr	Asp	Leu	Leu	Pro	Gly	Asp	Glu	Glu	Ile	Ala	Gln	Gly	Leu	Leu
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246	1				5					10					15	
	Leu	Asn	Glu		Phe	Phe	Pro	Glu		Gly	Leu	Ala	Ser	-	Ser	Leu
248				20					25					30		
	Ser	Leu		Lys	Ala	Leu	Leu		Leu	Val	Glu	Ser		Ser	Pro	Pro
250			35	_	_	_	_	40	_	_	_		45	_	_	_
	Met		Pro	Trp	Leu	Cys		Thr	Arg	Tyr	Lys		Glu	Leu	Cys	Ser
252		50		7			55	_	_	_		60	_	_	~3	-1
	Arg	Tyr	Ala	Glu	Thr		Thr	Cys	Lys	Tyr		GIu	Arg	Cys	GIn	
254		•	~ 3	_		70	_			_	75	_	•	_		80
	Ala	His	GLY	Leu		Asp	ьeu	HlS	vaı		ser	arg	HIS	Pro		ıyr
256	T	m)	63	T	85	7	m\-	m. · · ·	TT 2 -	90	7.7 -	α 1 = :	m	C	95 Wal	m
	Lys	Tnr	GIU		cys	arg	Inr	ıyr		Inr	Ala	GTA	ıyr		val	ryr
258	a 2	m1	7	100	T	Dl	77- 7	172 -	105	7	T	01	a 1	110	Dane	77-7
	Gly	inr	_	cys	ьeu	rne	val		ASI	ьeu	гаг	GIU		Arg	PLO	val
260	7	C1 -	115	C	7	7 ~~~	77a 7	120	C1	7	'π'h	Dha	125	77-	Dha	C1
Z₽I	Arg	GIN	Arg	cys	Arg	ASII	val	Pro	Cys	Arg	.Inr	rne	Arg	AId	FIIE	стА

Input Set : A:\140140349U2.AMENDSEQ.TXT
Output Set: N:\CRF4\04012005\J049586A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:27; Xaa Pos. 1

Seq#:46; Xaa Pos. 2,3,4,5,6,7,8,9,11,13,16,17,19,21

Seq#:47; Xaa Pos. 2,3,4,5,6,7,8,9,11,12,13,14,15,17,18,19

VERIFICATION SUMMARY

PATENT APPLICATION: US/10/049,586A

DATE: 04/04/2005

TIME: 14:47:53

Input Set : A:\140140349U2.AMENDSEQ.TXT
Output Set: N:\CRF4\04012005\J049586A.raw

L:633 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:27 after pos.:0 L:807 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:46 after pos.:0

M:341 Repeated in SeqNo=46

L:827 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47 after pos.:0

M:341 Repeated in SeqNo=47